



Early Journal Content on JSTOR, Free to Anyone in the World

This article is one of nearly 500,000 scholarly works digitized and made freely available to everyone in the world by JSTOR.

Known as the Early Journal Content, this set of works include research articles, news, letters, and other writings published in more than 200 of the oldest leading academic journals. The works date from the mid-seventeenth to the early twentieth centuries.

We encourage people to read and share the Early Journal Content openly and to tell others that this resource exists. People may post this content online or redistribute in any way for non-commercial purposes.

Read more about Early Journal Content at <http://about.jstor.org/participate-jstor/individuals/early-journal-content>.

JSTOR is a digital library of academic journals, books, and primary source objects. JSTOR helps people discover, use, and build upon a wide range of content through a powerful research and teaching platform, and preserves this content for future generations. JSTOR is part of ITHAKA, a not-for-profit organization that also includes Ithaka S+R and Portico. For more information about JSTOR, please contact support@jstor.org.

abundant supply of food in the scrubs and swamps. The climate is dry for eight months of the year; the rainy season lasts from December to March inclusive, and this is the hot season, the thermometer reaching sometimes 98° in the shade. But, during the dry season, a fresh bracing breeze from the south-west blows almost continually, and the thermometer averages during the day from 80° to 85° . The climate is perfectly healthy; there is no local malady, even in the wet season, and the author considers that the new settlement will hereafter become a sanatorium for invalids from India and China. The author gave also a most interesting description of the aborigines, of which four distinct tribes inhabit the district.

The paper will be printed entire in vol. xxxvi. of the 'Journal.'

2. *Explorations in North-Western Australia.* By JAMES MARTIN, Esq., M.B.

The chief geographical interest of this paper referred to the discovery and exploration of the mouth of the Glenelg River, by the party of which Mr. Martin was a member. The River Glenelg was discovered so long ago as 1838, by Captain (now Sir George) Grey and Lieutenant Lushington, and an attractive account of the region was given in the 'Journals of Discovery in North-West Australia,' afterwards published by Captain Grey. But neither of these explorers was able to reach the mouth of the river, nor had it been detected by our naval surveyors. The expedition to which Mr. Martin belonged was organised in 1863, by a committee of settlers in Western Australia, for the discovery of new pastoral lands in the tropical portion of the colony; and the party, consisting of four explorers, set sail in the schooner *Flying Foam*. It was not until many vain attempts and much delay, that the schooner succeeded in finding the mouth of the Glenelg, in the place where it was supposed to lie—namely, in Doubtful Bay. The difficult entrance from the sea led into a large expanse of waters (called "George"), all the channels out of which, landward, seemed to end in a passage choked up with mangroves. Land parties could, however, descry from the top of a neighbouring hill the river flowing towards the place, and the true mouth was, after six days' search, found in the north-eastern end of the George Water. The river for the first few miles flows through a rugged hilly country, and has many rocky islands in its channel. Its shores afterwards become flatter, but the navigation was difficult, owing to the great fall of the tide—28 feet—leaving the schooner aground always at low water. After

connecting their explorations with those of Grey and Lushington, the party examined the tract of country between the Glenelg and Camden Harbour, and reported favourably on its suitability for settlement.

This communication will be printed *in extenso* in the 'Journal,' vol. xxxv.

At the conclusion of the papers, the CHAIRMAN read the following extract from a letter of Admiral Stokes, who expressed his regret at being unable to attend the meeting:—

"I consider Mr. Martin's discovery of great importance, as it gives water-carriage to the good land that Sir George Grey (the discoverer of the Glenelg) speaks of having found on its banks. Such a mode of transit in so rugged a country must indeed be considered a great acquisition. Delighted as I always am, at seeing enterprising colonists taking up positions on the northern and western shores of Australia, I fear that success will not attend settlers on the north-west coast in the neighbourhood of Camden Bay; for, bountiful as Nature has there been in the way of harbours and in giving a great rise and fall of tide, numerous islets and outlying reefs give the coast a forbidding approach, added to which are the frequent calms which prevail. Nowhere does salubrity depend more on a certain fresh breeze than in intertropical settlements. I consider that the very rugged nature of the country, with its ovenlike valleys in the neighbourhood of Camden Bay, holds out but poor prospects for the proprietor of cattle and sheep."

Mr. CRAWFURD was of opinion that the tropical part of Australia, which constitutes about one-third of the whole continent, is not at all likely to be a fit place for the rearing and pasturing of sheep, or for European colonization. With respect to the temperate portion of Australia, although possessing a most salubrious climate, it is deficient in those grand features of physical geography which make a country fertile and capable of sustaining a great population. For instance, there are no great rivers in this vast region: there is no valley of the Mississippi; none comparable to that of the Ohio, the Danube, or the Ganges.

Sir CHARLES NICHOLSON here remarked that there were the valleys of the Murrumbidgee and the Darling, much larger than any of those which Mr. Crawford mentioned, except the Mississippi.

Mr. CRAWFURD, in continuation, said that the South Australians had planted a settlement at Adam's Bay, in lat. 12°, and never was failure more complete. The country in that part of Australia was totally unfit either for sheep or for Europeans. It was from that spot that a party of the settlers made the extraordinary boat-voyage of 1600 miles (of which we heard an account on a previous evening) in order to escape from it. Another attempt had been in lat. 15°, at Camden Harbour, the neighbourhood of which Mr. Martin said was favourable for depasturing sheep. Admiral Stokes, on the contrary, said it never will be fit for the depasturing of sheep. The summer-heat is from 98° to 120°, and is that a place for sheep whose fleece is required only for warmth? He had seen an account in a Dutch newspaper of a visit to the settlement paid by the English vessel *Jenny Orwell*, in the spring of 1865. The account stated that there were 100 persons there, and that the chief purpose of the experiment was the depasturing of sheep, of which about 5000 were taken to the place. The colonists were in a very desponding condition: a great many of the sheep had died from the effects of heat and want of food; and out of the 5000 a few hundred only remained, after seven months' residence. That report seemed to condemn Camden Harbour most completely.

Sir CHARLES NICHOLSON said, on one or two points he was happy to agree with Mr. Crawford. He thought, for instance, that the settlement at Camden Harbour was a most absurd enterprise. The first statement in the report of the survey of that district—namely, that there was only a million of acres of land—was at once decisive against the establishment of a colony there, when there are hundreds of millions of acres of land unappropriated in various other parts of the Australian continent. Besides, the very character of the grass, 6 feet high, was to any one accustomed to the rearing of sheep a sufficient proof that such a country is utterly unfit for the depasturing of sheep. This was the first occasion upon which he had really acquired a clear conception that a colony had been formed in that particular locality. With regard to Adam's Bay, no doubt there has been a great deal of wrangling and squabbling among the persons entrusted with the founding of that colony; but it remained to be proved that that country is not capable of profitable occupation in some way or other. That North Australia should be placed under the jurisdiction of South Australia is an absurdity for which the Colonial Office is responsible. That sheep will thrive within the limits of the tropics is a matter placed utterly beyond doubt. It is notorious that, at the present moment, there are within the region of the tropics not less than four or five millions of sheep depasturing, and thriving as well as in any part of the Australian continent. He quite admitted that further north the climate would be found incompatible with the healthy growth of sheep; but in those regions at the head of the Gulf of Carpentaria there is most luxuriant pasture suitable for cattle. With regard to the alleged want of fertile valleys, like those of the Mississippi and the Ohio, it is a fact that there are some of the largest rivers in the world in the south-eastern part of Australia, which, in the case of the Murrumbidgee and the Murray, are made available by steamers for a distance of 1200 miles. There is no doubt that these valleys will ultimately become the seat of a vast population. Again, on the east coast, the Fitzroy River drains an area of country as large as the whole of England. There are portions of Australia destitute of water, and not suitable for settlement; but there is the whole of the eastern and south-eastern portions, with capabilities equal to those of any portion of the globe.

Mr. CRAWFORD said he was aware of the existence of the Murrumbidgee and the Murray, but they have no outlet, and are, therefore, inferior to the great rivers in other parts of the world. No doubt, parts of the continent are fertile; but the fact that the Australians are fed by corn brought from California and Chili shows that the general fertility of the country is inferior. He had said that with respect to sheep there is no part of the world comparable to temperate Australia. The amount of wool imported, into this country alone, from Australia last year was 99,000,000 lbs., of the estimated value of 8,800,000*l*. He had also said that, within certain limits of the tropics up to, perhaps, about latitude 21°, sheep might thrive. But he maintained that the fleece deteriorated considerably in quality and quantity; already the fleece of Queensland is inferior to the fleece of Sydney.

The CHAIRMAN, in conclusion, said what we wanted in discussions of this kind was as little as possible of inferential argument and as much as possible of direct testimony. On the one hand we have the fact that a settlement has been formed in tropical North-Western Australia, the sheep being transported with the settlers by a long sea-voyage from Swan River, and we know that those sheep have entirely failed. On the other hand, we have direct testimony that sheep from Queensland and the temperate regions of Australia have been gradually transported by land into the sub-tropical and tropical portions of the continent, passing quietly and gradually through a grass country favourable to the pasturing of sheep, and these sheep have suffered no material deterioration and have most distinctly thriven. It is not in the competence of any man

at present to be able to draw a line, and say that at the tropic of Cancer, or at a line north of it, the pasturing of sheep stops and ceases to be profitable. The most that can be said is this—he was citing the opinion of Mr. Brodribb, quoted by Sir Roderick Murchison in his Annual Address—that sheep do most distinctly thrive which go northwards from Queensland to the tropics: not in the equatorial tropics, but in the less typically tropical regions on the north side of the tropic of Cancer. But the weight of the fleece does undergo diminution, and it has been found necessary to import fresh rams every two years from the temperate regions of Australia, in order to perpetuate the breed and enable it to produce wool at anything like a satisfactory profit. Still, if that can be done, it is so far an argument in favour of this gradual and tentative extension of sheep-breeding from Queensland northward. He wanted to point out the difference between that and the sheep which are transported, *per saltum*, by a long sea-voyage from south to north; and that, in this way, it is perfectly possible to reconcile the conflicting statements they had heard. He wished, finally, to explain that the new establishment at Cape York is neither an agricultural nor a pastoral settlement, but is founded by the Government of Queensland, in conjunction with the Home Government, chiefly as a harbour of refuge in connection with the navigation of Torres Straits.

Sixth Meeting, 12th February, 1866.

SIR RODERICK I. MURCHISON, K.C.B., PRESIDENT, in the Chair.

ELECTIONS.—*E. Boutcher, Esq.; R. B. Byass, Esq.; S. Canning, Esq.; O. J. Crawford, Esq.; John King, Esq.; Lieut. H. Morland; J. H. Murchison, Esq.; Alex. Ramsay, Esq.; J. E. Saunders, Esq.; H. T. Sharp, Esq.; Rev. T. Wiltshire, M.A.*

ACCESSIONS TO THE LIBRARY SINCE THE LAST MEETING, 22ND JAN., 1866.—Portrait of the late Sir John Barrow, Bart., F.R.S., &c.; presented by John Barrow, Esq., F.R.S., &c. ‘A Visit to the Plateau of Gusakan,’ by Lieut.-Colonel L. Pelly. ‘A Journey between Bushire and Shiraz,’ by Lieut.-Colonel L. Pelly. ‘Memoir on the Gorilla,’ by R. Owen, D.C.L., F.R.S., &c. All presented by their respective authors. ‘Asia,’ the first part; being an accurate description of Persia, by J. Ogilbie; presented by John Power, Esq., F.R.G.S. ‘Notes of a Trip from Shanghai to Ningpo, *via* Loochow and Hangchow,’ by C. Jamieson, Esq.; presented by Colonel Sykes, M.P., F.R.S. ‘Gulielmi Pisonis de Indiæ utriusque Naturali et Medica,’ presented by S. M. Drach, Esq., F.R.G.S. Continuations of Journals, Periodicals, &c.

ACCESSIONS TO THE MAP-ROOM SINCE THE LAST MEETING.—Map of Mauritius, or Isle of France; presented by Lieutenant Oliver, R.A. Chart of the Nicobar Islands, by Commodore B. v. Wüllerstorff-Urbair, of the *Novara*, Austrian frigate. An Atlas of the States of the Columbian Republic, by A. Codazzi; also a Map of the same Republic and a Map of the River Magdalena; presented by Grand-General T. C. de Mosquera, President of the United States of